



NBII Southwest Information Node

The NBII Southwest Information Node will create a Web-access gateway to biological information for the Southwest region.

Background

The National Biological Information Infrastructure (NBII) <www.nbii.gov> is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems. Data and information maintained by federal, state, and local government agencies; non-government organizations; and private-sector organizations are linked through the NBII gateway and made accessible to a variety of audiences including researchers, natural resource managers, decision-makers, educators, students, and other private citizens.

Implementation of the NBII is being accomplished through the



Santa Maria River, Arizona

development of nodes that serve as interconnected entry points to the NBII and the information held by partners. These nodes function as fully digital, distributed, and interactive systems that focus on developing, acquiring, and managing content on a defined subject area (thematic nodes) or a geographic region (regional nodes).

One of the regional nodes being developed is the Southwest Information Node.

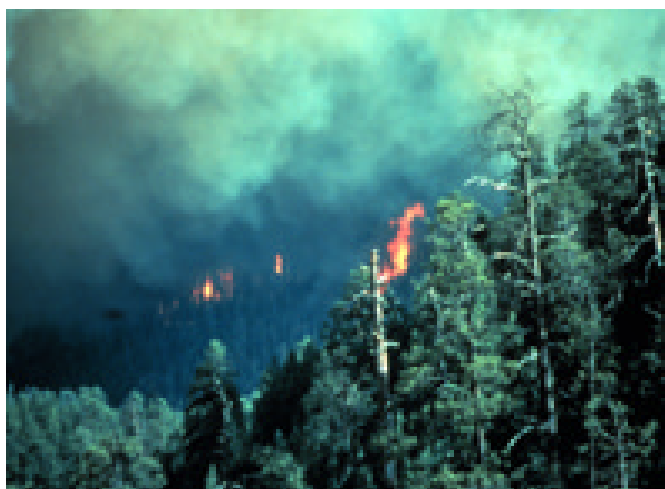
Issue

In the Southwest, federal resource agencies, environmental organizations, corporations, and the public need access to critical biological information to more effectively address the conflicting demands on natural resources.

When fully implemented, the new NBII Southwest Information Node will provide access to hundreds of biological databases, and will host a suite of information tools tailored to address the complex environmental issues of the Southwest.

These tools will let the users model, simulate, forecast, interpret, and visualize biological and environmental conditions and processes, and will address questions such as:

- Is there enough water to support the current rate of urbanization?



Jemez Mountains, New Mexico



Desert tortoise (Gopherus agassizii)

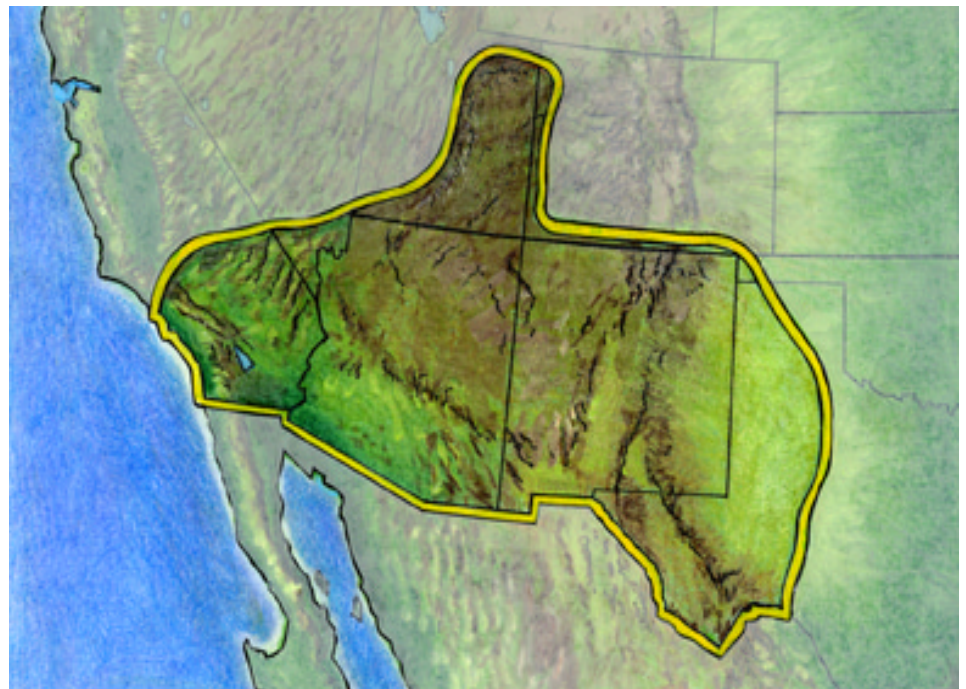
- What land use changes are predicted by 2020 under different water use scenarios?
- Why does the Southwest have the highest level of species endangerment?
- What areas are at high risk of fire, or high risk of invasive species?

Major Partnership and Customer Opportunities

Initially, the NBII Southwest Information Node will be established and supported through a unique partnership between the University of New Mexico, New Mexico State University, the U.S. Geological Survey (USGS) Midcontinent Ecological Science Center, and the USGS Center for Biological Informatics. These partners are leaders in blending science and technology, having earned international reputations for scientific achievement and technical assistance. Offering common data sets and tools, the Southwest Node will attract many other partners such as the National Park Service, Bureau of Land Management, U.S. Forest Service, Bureau of Reclamation, U.S. Department of Defense, State Heritage Programs, state and local governments, Tribal governments, and conservation organizations throughout the region.

Objectives and New Products

The NBII Southwest Information Node will create a Web-access gateway to biological information for the Southwest region. Start-up funds in 2001 will establish the node, initially serving a



Geographic coverage of the NBII Southwest Information Node

limited data set for New Mexico. When fully implemented, the Southwest Node will cover Arizona, New Mexico, the Mojave Desert, the Colorado Plateau, and West Texas. The expanded node will be state-of-the-art, designed to serve relevant data and provide for custom analyses tools.

Node Features

Although a prime focus of the NBII is on biological data, the Southwest Node will be strengthened by data on geology, hydrology, and geography. At the outset, node design goes beyond simply “serving” data. This node will link data to models, synthesize large data sets, use super-computers for complex simulations, establish

common data sets for multi-agency projects, and network scientists and managers who rely on biological information. The establishment of the Southwest Information Node exemplifies NBII’s role as an international leader in the dissemination of scientific information.

For More Information

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Find us on the Web at:
<<http://swin.nbii.gov>>.



Colorado National Monument, Colorado